attachments of the external semilunar cartilage and the anterior crucial ligament be borne in mind, must almost certainly have occurred in the other two cases, viz., that the external semilunar cartilage went up with the anterior crucial ligament and the separated spine of the tibia, and thus remained adherent to the femur, while the internal, of course, kept its place on the surface of the tibia.—*Med. Times and Gaz.*, Sept. 30, 1876.

49. *Suture of the Sciatic Nerve.*—In the preceding number of this Journal (p. 586), there was noticed a case of this, and it is stated (*Lancet*, Oct. 21st) that the same operation has since been performed by Langenbeck, and the details are given in a letter from Dr. Du Pré to the *Journal de Médecine* of Brussels. The sciatic nerve had been divided two years before by a fall upon a knife. The limb was wasted, and the outer part of the foot and leg was anæsthetic. A longitudinal incision was made over the cicatrix, and the two ends of the divided nerve were found two inches apart and surrounded by a considerable quantity of cicatricial tissue. Each extremity was considerably enlarged, the upper more than the lower. A small portion of the lower extremity was removed and examined for nerve-fibres, to ascertain whether its degeneration was so great as to preclude hope of recovery. Finding that it contained nerve-fibres, the extremity of the central portion was removed, and, the knee being bent, the extremities were brought together and united by two ligatures of catgut, the wound closed, and the knee kept in the same position. The interference with the nerve was followed by no bad symptom, and two months afterwards, although there was no return of motor power, it was thought that sensation had improved, for the patient could indicate the place touched, where before there had been no sensitiveness.

OPHTHALMOLOGY.

50. *Modified Operation for Cataract.*—M. Galezowski, at the recent meeting of the French Association for the Advancement of Science, described an operation for cataract, which he had devised. At the present time, he said, "every surgeon endeavours to modify Graefe's operation, which is at present almost abandoned." He described the modications he had adopted; he does not make the sclerotic puncture and counter puncture, but restricts the incision to the limits of the cornea; he abandons the linear method, and substitutes for it an incision at the lower portion of the cornea, making a small flap. He also excises the lower portion of the iris, though the deformity of the pupil is then more observable, but this he thinks will be but a slight inconvenience to those who desire one thing, the restoration of sight. M. G. attributes to this inferior excision, the great success he has obtained, which is at present 100 per cent. Of 67 operations performed in the city, he has not failed in a single instance. By his method after the first steps of the operation the eye is free in its motions especially after the removal of the lens, and to this M. G. attributes the rarity of the loss of the vitreous. Another modification, which he considers not less important, consists in the abandonment of the use of the cystitome for the division of the capsule, and effecting this with Graefe's knife. As soon as the puncture is made the point of the knife is directed to the lens and the capsule may be divided easily; after the counter puncture is effected the flap is made. Latterly, instead of excising the iris he has made a simple incision of the sphincter pupillæ with very satisfactory results, but he has not determined to adopt this definitely. The statistics given to show the value of his method were as follows: Of 385 operations, 67 were performed in private practice, of which last all were successful. Of 322 operated on at his clinic, 288 were successful.—*Revue Scientifique*, August 26, 1876.

51. *Causes and Origin of Near-Sight.*—Professor ARLT, of Vienna, has published a small work on this subject, which has not yet reached us, but we give the following *resumé* of the distinguished Professor's conclusions, communicated to the *Boston Med. and Surg. Journal* (Oct. 19), in a letter from Dr. Hasket Derby.

"According to Prof. A., the ordinary immediate cause of near-sight is the lengthening of the eyeball in the direction of its sagittal axis. Increased curvature of the cornea, as well as abnormal curvature, position, or density of the lens are of exceptional occurrence.

"In connection with this departure of the eyeball from its normal shape, we find the sclera driven back and attenuated, especially about the posterior pole, the choroid and retina expanded, the vitreous increased in volume by means of serous exudation, rendered even somewhat fluid at its posterior portion, the longitudinal fibres of the ciliary muscle hypertrophied, and the circular but slightly developed, while the ciliary processes, the iris, and the lens occupy a deeper plane relatively to the basis of the cornea.

"It has never yet been demonstrated that this increased length of the eye is congenital. The myopia of new-born children is due to the great curvature of the lens that then exists. The existence of the so-called *conus* in new-born children has no connection whatever with an increased length of the eyeball in the sagittal direction. Myopia may originate in childhood.

"Thus myopia itself is never congenital, though a *disposition* to it may be. Nothing goes to show that there is an abnormal innate tendency in the eye to increase in length; indeed, the anatomical changes found in a myopic eye that has normal acuteness of vision go to controvert such a theory.

"That myopia may be *acquired* by individuals who have no hereditary proclivities in this direction we have distinct evidence.

"The principal among the disposing causes is a certain want of tone in and yielding disposition of the sclerotic coat.

"Another factor may be found in the use of muscular power, partly as regards the accommodation, partly as regards the convergence of the visual axes.

"The remote (that is, the predisposing or exciting) causes of acquired near-sight include everything that tends to cause the muscular power of the eye to be expended in one direction, be it excessive use on near objects, be it neglect of use on distant objects.

"If hereditary or diseased tendency exist in a given case, the ordinary employment of the eyes will tend to further the giving way of the sclera. If circumstances are simply favourable (youth and normal development of the organ), myopia can only ensue when the eyes are unduly tried and insufficiently rested.

"The change in shape of the eye is brought about by a gradual pushing out of its posterior wall. Neither muscular action (on the part of the ciliary muscle or oblique muscles) brings this about, nor is it caused by forcible expansion of the scleral layers, or of the optic nerve sheath; it is due solely to the repeated temporary increase of pressure in the posterior segment of the eye.

"This repeated temporary increase of pressure in the posterior portion of the eye is chiefly due to congestion of the uveal tract, and secondarily to exudation of serum in the posterior part of the vitreous.

"The congestion is caused by the impeded flow of blood from the vasæ vorticosæ. It is hardly likely that the simple exercise of the accommodation brings this about, but it is almost indubitable that, when the convergence of the visual axes increases, the rectus externus and the obliquus inferior muscles severally exert a pressure on the venæ vorticosæ that impedes their circulation.

"These are substantially the views Professor Arlt has just put forth. The pamphlet is illustrated by plates showing the different conformation of the ciliary muscle in the myopic, the emmetropic, and the hypermetropic eye.

"With reference to the prophylactic measures to be adopted in the case of a student who exhibits acquired and increasing myopia, I was glad to find that Arlt advised entire disuse of the eye on near objects for a lengthened period, a course of atropine treatment, and, if possible, a sea-voyage or a prolonged journey, during which the eyes should be exercised on distant objects."